



RCA Amateur Radio Club

Indianapolis, IN



ARRL Affiliated Club

www.w9rca.org

JANUARY 2023

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE TUESDAY, JANUARY 10th, 6:30 PM AT NORTH SIDE EVENTS, FORMERLY THE KNIGHTS OF COLUMBUS, 2100 EAST 71st, INDIANAPOLIS, IN

RCA ARC NEWS

DECEMBER MEETING SUMMARY – Thanks to all who attended the December meeting. Jim, K9RU, has repaired and sold the Yaesu FT101EE donated to the club by Greg, K0GAH. It was a very clean 1976 vintage radio and was bought by a ham for his collection. The RCA ARC had a FT101EX in the club station in the mid 70s. Field Day results were in the December QST magazine. The Indy United Club (W9SU +W9RCA) which our Club helped sponsor finished first in the 3A category. We will help sponsor the 2023 FD operation which is expected to be a class 4A operation. The Indianapolis Radio Club Winter Field Day will be held at the Salvation Army Facility at 4020 Georgetown Rd. All are welcome to attend. Bob Burns will have his lab equipment there to check out your handheld radios. Jim, AF9A, reported we're still having an intermittent problem with the '88 repeater where the 88.5 Hz CTCSS tone is not always broadcast. A discussion of amateur radio emergency services in the local area ensued. Matthew, W9SOX, is the Amateur Radio Emergency Service (ARES) coordinator for Marion County.

AMATEUR RADIO LICENSE TEST SESSION

Date: Saturday, January 14, 2023

Time: Starting at Noon **by appointment only.**

Location: Salvation Army EDS Training Facility, 4020 Georgetown Rd
Indianapolis, IN 46254-2407

Contact: Jim Rinehart, K9RU email: kj9ru@arrl.net Phone: 317 721-1458

Required: FCC FRN and a completed NCVEC 605 license application form.

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Salvation Army Open Net, Thursday, 7PM, W9RCA repeater, 146.88 MHz, tone 88.5 HZ

Jan 7 ARRL Kids Day <http://www.arrl.org/kids-day>

Jan 7-8 ARRL RTTY ROUNDUP <http://www.arrl.org/rtty-roundup>

JAN 21-23 ARRL January VHF Contest <http://www.arrl.org/january-vhf>

Jan 28-29 Winter Field Day <https://winterfieldday.org/>

WA7BNM expanded contest calendar, <https://www.contestcalendar.com/contestcal.htm>

WINTERHEAT – Winterheat is a month long amateur radio simplex operating event. The goal and purpose is for amateur radio operators to make as many contacts as possible over a month long period of time using only designated VHF/UHF FM and digital voice simplex frequencies.

The event had over 1,000 registered participants in 2022. All contacts must be made during the event period: 0001 January 1, 2023, to 2359 January 31, 2023. For more information: <https://hamactive.com/index.php> -ARRL Section Newsletter

WINTER FIELD DAY – Again this year, there will be a Winter Field Day operation at the Salvation Army Training Center at 4020 Georgetown Road. This is a casual operation with operation up in the N9EDS club station and a group gathering downstairs with chili being served. Bob Burns, AK9R will be setup with his test equipment so you can have your Hts and other radios checked out. This is a great chance to meet other hams in the area and get on the air if you have not operated HF or in a contest.

TECHNICIAN CLASSES COMING IN FEBRUARY – Bruce Enz, W9ENZ, will be hosting Technician classes on Saturday February 18th and 25th at the Chapel next to the Church of Jesus Christ of Latter-day Saints Temple in Carmel. The Chapel address is 11257 Temple Drive, Carmel, Indiana 46032. Bruce asks that on February 18th, please arrive at 8:45, with the class starting at 9 AM and running to 4 PM, with a 1-hour lunch break. On Saturday February 25th, please arrive at 8:45. Class will run 9 AM to noon, followed by a 1-hour lunch break, with testing starting at 1 PM until done. Bruce says testing normally concludes around 2:30 or 3 PM. Testing for General Class and Extra Class will also be available. The registration link for the test will be emailed to class members the week of the test.

Bruce says that the class is free, and testing is free. **Those testing will need to obtain an FRN (FCC Registration Number) prior to testing.** Emails will be sent to class members explaining how to obtain an FRN. The 10-year license costs \$35 to the FCC. Bruce will send those registered for class websites where they can self-study and take practice tests for free.

If you know of someone who wants to get licensed, have them contact Bruce at bruceenz@gmail.com or (317) 201-8299 to get registered. IRC Newsletter – Ken Bandy, KJ9B

AMATEUR RADIO FEATURED ON MONTANA PUBLIC TELEVISION

On Thursday, November 24, 2022, Thanksgiving evening, Montana PBS aired a documentary about amateur radio that was appropriately titled, HAM. The 25-minute program was produced by students, in cooperation with the Greater Montana Foundation, as well as the School of Journalism and the School of Visual & Media Arts at the University of Montana (UM) in Missoula. Several local amateur radio operators were featured in the program, including Lance Collister, W7GJ; Dennis Lane, KR7Q; Mike Leary, K7MSO, and Keith Graves, NE7R. Together, they talked about how amateur radio has evolved and their experiences as active hams.

The program is available to watch on the MontanaPBS website, at www.montanapbs.org/programs/ham.

"I was happy to agree to the interview," said ARRL member Dennis Lane, KR7Q, who was among a handful of hams featured in the video, such as Lane and his wife, Debi; Lance Collister, W7GJ; Karen Orzech; Mike Leary, K7MSO; Keith Graves, NE7R, and Lois Graves, W7LAG. "The students visited my home and ham shack in early March of 2022. They seemed to be interested in the human-interest aspect of ham radio," Lane continued. "I tried to emphasize the relationships and lifelong friendships that I have enjoyed over my 45 years in the hobby."

Lane also shared, "When I told the students about Parks on the Air®, they asked if they could come with me on my next POTA activation. I was happy to have them join me at Lee Metcalf National Wildlife Refuge in Stevensville." During the activation, Lane made radio contacts on both VHF and shortwave, using an end-fed half-wave antenna. "One of the first contacts I made was in Alaska. They seemed very excited about that."

The UM student film crew included Grace Wolcott, Kal Bailey, Jared Bengel, Karter Bernhardt, Julien Dousset, Maiya Fleck, Marcia Heydt, Natalie Verploegen, and Ryan Weibush. Lane published these personal videos from the filming:

<https://www.montanaartqwerks.com/My-Ham-Radio-Page-de-KR7Q/Mpbs/i-wqc9jJz/A>
https://youtu.be/S_UBc-b-Nek (YouTube)

WHEN ALL ELSE FAILS: AMATEUR RADIO HELPS RESCUE LOST HIKER

Editor's note: The following event took place on Sunday afternoon, December 11, 2022, and was told to ARRL News by Raul "Skip" Camejo, AC1LC, Public Information Coordinator for the ARRL New Hampshire Section.

A New Hampshire man and his dog went out for a day hike yesterday in the Belmont area of central New Hampshire. Things went well until his cell phone battery died. With darkness near and a prediction of snow, a leisurely day hike was quickly turning into a serious health and safety issue for the hiker.

Fortunately for him, he is also an amateur radio operator and brought along his digital mobile radio (DMR) handheld radio with him. With no cell phone capability, he made a call on the DMR New Hampshire statewide channel through the Gunstock (Mountain) DMR repeater, seeking assistance. His call was answered by Bill Barber, NE1B, who was monitoring the channel. The hiker asked Barber to call his wife, because he could not text or get "pinged" with his dead cell phone. Barber contacted the hiker's wife, and she was glad to hear that someone was in contact with him. Unfortunately, he did not know exactly where he was and believed he would have to walk through brush for an hour or more to get to a road.

His wife called the local police department, who began a search with their local fire department. Amateur radio was the only communication from about 4:30 to 6:30 PM. Barber was able to make contact with Rick Zach, K1RJZ, who lives closer to the search area, and was familiar with the area's snowmobile trails and roads. Zach coordinated communication between the responding police units and the lost radio operator on the New Hampshire Statewide talkgroup.

Police and fire units attempted to assist in the search by activating their sirens in different locations to try to obtain a location on the ham operator, but he was not able to hear them.

Another amateur radio operator, Chuck Cunningham, K1MIZ, was monitoring the events on Net Watch and noticed that the lost ham had accidentally changed channels. This information was passed along, and 2-meter DMR communication continued until the lost ham walked out to a road and was able to advise searchers of his location. The search and checkout ended successfully at 6:30 PM.

Thanks to the efforts of Bill Barber, NE1B (ARRL Life Member); Rick Zach, K1RJZ (ARRL member), and Chuck Cunningham, K1MIZ. Barber listed some very important lessons learned from the incident:

- Radio batteries last longer on DMR radios than on analog mode.
- Even his wife had trouble with her cell phone coverage at home.
- Monitor your local state DMR channel to help others nearby.
- You may want to program 146.52 FM next to your state channel for signal strength direction finding if and when you're out of repeater range. Some hams still monitor 146.52 MHz simplex.
- Stay on the primary channel until you know more hams are nearby to direction find your signal.
- Hike with DMR. Network sites cover many areas of New England that do not have any cell service.
- Hike with a flashlight.

And I would like to add one more item to the list. My son is one of the leaders of Pemigewasset Valley (New Hampshire) Search & Rescue Team and unfortunately responds to too many calls for lost hikers. One very important item that he stresses is that hikers file a "flight plan." Let someone who is not going on the hike know where you are going, how long you expect to be gone, and what communication equipment or capability you have with you. This also applies if you are going out hunting, fishing, or boating.

REP. LESKO INTRODUCES BILL TO REPLACE SYMBOL RATE LIMIT WITH BANDWIDTH LIMIT

Congresswoman Debbie Lesko (AZ-08) introduced a bill in the U.S. House of Representatives (H.R. 9664) on December 21, 2022, to require that the Federal Communications Commission (FCC) replace the current HF digital symbol rate limit with a 2.8 kHz bandwidth limit.

After being petitioned by ARRL The National Association for Amateur Radio® in 2013 (RM-11708) for the same relief, in 2016 the Commission issued a Notice of Proposed Rulemaking (WT Docket No. 16-239) in which it agreed that the HF symbol rate limit was outmoded, served no purpose, and hampered experimentation. But the Commission questioned whether any bandwidth limit was needed in its place. Most amateurs, including the ARRL, objected to there being no signal bandwidth limit in the crowded HF bands given the possibility that unreasonably wide bandwidth digital protocols could be developed, and since 2016 there has been no further FCC action.

In conjunction with introducing the legislation, Congresswoman Lesko stated that "With advances in our modern technology, increased amounts of data can be put on the spectrum, so there is less of a need for a regulatory limit on symbol rates. I am pleased to introduce this important piece of legislation to update the FCC's rules to support the critical role amateur radio operators play and better reflect the capabilities of our modern radio technology."

ARRL President Rick Roderick, K5UR, hailed introduction of the bill. Roderick stated that "the FCC's delay in removing this outdated restriction has been incomprehensible, given that the biggest effect of the delay is to require totally inefficient spectrum use on the already-crowded amateur HF bands. I hope that the Commission will act to remove this harmful limitation without waiting for the bill to be passed."

ARRL Legislative Committee Chairman John Robert Stratton, N5AUS, added that "the symbol rate limit hampers experimentation and development of more efficient HF data protocols by U.S. amateurs. For all practical purposes the field has been ceded to amateurs outside the U.S., where there is no comparable limit. Removing the restriction not only will allow U.S. amateurs to use the most efficient data protocol suitable for their purpose, but it also will promote and incentivize U.S. amateurs to experiment with and develop even more efficient protocols."

A copy of this press release is available from ARRL:

www.arrl.org/news/rep-lesko-introduces-bill-to-replace-symbol-rate-limit-with-bandwidth-limit

MARINES TO GAIN RADIO OP EXPERIENCE VIA AMATEUR RADIO

On Wednesday, December 7, 2022, 22 Communication Officers at the Marine Corps Communication-Electronics School (MCCES) in Twentynine Palms, California, became amateur radio operators. W6BA, the [Morongo Basin Amateur Radio Club](#) (MARC) administered the exams and 21 candidates passed their Technician exam, and one passed their General exam. 14-year-old Kalynn Cossette, KN6WVD, was the youngest candidate who passed her Technician exam.

Retired Marine Corps Warrant Officer 4 Robert Cloutier, WO4ROB, and MARC President says it was a great event and he is excited to see so many new amateur radio operators. So, what drove the officers to want amateur radio licenses? Cloutier pointed out that all of the candidates already have a background in radio administration but not operating experience.

"Chief Warrant Officer (CWO3) Kalem Cossette, KK4KC, one of the training officers at MCCES, introduced amateur radio to the Communication Officers," said Cloutier. "Most of the students were curious on how to get their license, so CWO3 Cossette contacted the MARC to schedule an exam session."

Cloutier said that all new license holders were offered a free club membership but many of them will be deployed to other locations around the world and will be able to join other amateur radio clubs. He said they hope to conduct exams every three months.

The Morongo Basin Amateur Radio Club is an ARRL Affiliated Club.

VOLUNTEERS ON THE AIR

As announced in the January 2023 issue of QST, ARRL is holding the year-long operating event, Volunteers On The Air (VOTA), honoring all ARRL volunteers.

In similar fashion to the 2014 ARRL Centennial QSO Party and the 2018 International Grid Chase, this event will be exclusively driven by contacts uploaded to Logbook of The World (LoTW).

Highlights of the event include:

Earning points for contacting W1AW portable stations: There will be week-long activations of portable W1AW/# stations in all 50 states, and in several US possessions/territories, which will generate on-air activity to earn points. Each state will be activated twice. The schedule of when each state will be activated will be updated as changes and additions occur. See the Points Table at www.arrl.org/volunteers-on-the-air for the full list of points.

Contacting ARRL volunteers or members on the air: ARRL Officers, Directors, Section Managers (and their appointees), staff, and even domestic and DX members, can be contacted for points.

Using LoTW (<http://www.arrl.org/logbook-of-the-world>) as the contacts data source, the Volunteers On The Air event features W1AW activations from all 50 states (twice) and several territories during 2023. Weeks will begin on a Wednesday and end on a Tuesday. Some weeks will be shown as off weeks to avoid other major operating events.

Participants will work W1AW portable stations and ARRL volunteers to earn contact points.

Participants do not need to upload to, or participate in, LoTW. Uploads to LoTW by W1AW portable stations and by the volunteers will feed the points scoring system.

A leaderboard will be activated after the event ramps up, and certificates will be available during and after the event concludes. Once the year is completed, an annual summary will be released.

If you review the state activations list and notice your state is not yet indicating a host, and you have interest in activating your state, consider reaching out to your Division Director to express your club's interest. For information and continued updates, visit the VOTA website at www.arrl.org/vota

REP. BILL JOHNSON INTRODUCES BILL TO ELIMINATE PRIVATE LAND USE RESTRICTIONS ON AMATEUR RADIO

Congressman Bill Johnson (OH-6) introduced a bill in the U.S. House of Representatives (H.R.9670) on Thursday, December 22, 2022, to eliminate private land use restrictions that prohibit, restrict, or impair the ability of an Amateur Radio Operator from operating and installing amateur station antennas on property subject to the control of the Amateur Radio Operator.

The exponential growth of communities subject to private land use restrictions that prohibit both the operation of Amateur Radio and the installation of amateur station antennas has significantly restricted the growth of the Amateur Radio Service. These restrictions are pervasive in private common interest residential communities such as single-family subdivisions, condominiums, cooperatives, gated communities, master-planned communities, planned unit developments, and communities governed by community associations. The restrictions have particularly impacted the ability of Amateur Radio to fulfill its statutorily mandated duty of serving as a voluntary noncommercial emergency communications service.

Congress in 1996 directed the Federal Communications Commission (FCC) to promulgate regulations (Public Law 104-104, title II, section 207, 110 Stat. 114; 47 U.S.C. 303 note) that have preempted all private land use restrictions applicable to exterior communications facilities that impair the ability of citizens to receive television broadcast signals, direct broadcast satellite services, or multichannel multipoint distribution services, or to transmit and receive wireless internet services. ARRL attempts to obtain similar relief for Amateur Radio were rejected by the FCC with a statement such relief would have to come from Congress.

ARRL Legislative Advocacy Committee Chairman John Robert Stratton, N5AUS, noted that Congress, in 1994 by Joint Resolution, S.J.Res.90/H.J.Res.199, declared that regulations at all levels of government should facilitate and encourage the effective operation of Amateur Radio from residences as a public benefit. He continued by stating that "H.R.9670, the *Amateur Radio Emergency Preparedness Act*, is intended to fulfill that mandate and preserve the ability of Amateur Radio Operators to continue to serve as a key component of American critical communications infrastructure."

ARRL President Rick Roderick, K5UR, and Mr. Stratton both extended on behalf of the ARRL, its Members, and the Amateur Radio community their thanks and appreciation for the leadership of Rep. Johnson in his tireless efforts to support and protect the rights of all Amateur Radio Operators.

For the full text of the bill, [click here](#) (PDF).

NASA "DECODES" SECRET MESSAGES ONBOARD THE ORION SPACECRAFT

NASA has a long history of hiding secret messages in its spacecraft and that tradition continued with the launch of the Orion crew capsule in November on top of the Artemis I rocket.

Five hidden messages were placed in the Orion capsule ranging from Morse Code to musical notes.

On the right side of the capsule below a window and next to the pilot's seat were the letters "C, B, A, G, F" - five musical notes for the first words in Frank Sinatra's song, "Fly Me to the Moon."

In the middle of the capsule, above the cockpit control console, was a Morse Code message that spelled out the name "Charlie" in remembrance of former Orion Deputy Program Manager Charlie Lundquist, who died in 2020.

Other messages included a picture image of a cardinal to the right of the pilot seat as a tribute to former Orion Program manager, Johnson Space Center director, and St. Louis Cardinals fan Mark Geyer, who died in 2021.

The other two messages were on top of the pilot's seat including Binary code representing 18. This is in honor of NASA's history of travel to the moon with the Apollo Program and to celebrate a spacecraft's return to the Moon after Apollo 17 for the Artemis Generation. The final message was in front of the pilot's seat, the country codes of each country with the European Space Agency (ESA) that participated in developing and building the spacecraft's European Service Module.



A Morse code symbol for "Charlie" commemorates the life of former Orion Deputy Program Manager Charlie Lundquist, who died in 2020. Photo courtesy of NASA.

SHORTS

Yaesu is discontinuing the FT-818, QRP HF/VHF/UHF all mode and the FTM-400DXR, C4FM/FM VHF/UHF mobile according to reports from various sources. According to R&L Electronics' website, they currently have stock on both radios, and HRO has over 200 FTM-400DXRs in stock. As an added bonus, Yaesu is offering a \$100 rebate on the FTM-400DXR through the end of January. - IRC KJ9B

Satellite holiday gift! In case you haven't heard, there is a new FM transponder satellite just in time for the holidays - FO-118 (CAS-5A).

In addition to the **U/V FM Transponder: Uplink 145.925MHz, Downlink 435.600MHz Bandwidth 15kHz** it also has a **U/V Linear Transponder, Uplink 145.820MHz, Downlink 435.540MHz, Bandwidth 30kHz** and, more interestingly, a **H/U linear Transponder Uplink 21.435MHz, Downlink 435.505MHz Bandwidth 15kHz. --N9KT**

QRP Labs' popular [QDX digital transceiver](#) is now available in two models -- one that covers 80, 60, 40, 30, and 20 meters, and a higher-frequency version that covers 20, 17, 15, 12, 11, and 10 meters. These QRP rigs have an embedded SDR, 24-bit 48 kSPS samples-per-second USB sound card, CAT control, synthesized VFO with TCXO reference. The QDX can transmit digital modes that use a single tone FSK signal for transmission (e.g., FT4, FT8, RTTY, Olivia).

Cool new widget for POTA - For anyone who operates POTA (Parks On The Air), either as an activator or hunter, WD4DAN has created a cool little widget that you can put on your QRZ page that allows visitors to your page to see an overview of your POTA activity. This is much the same as what has been available for years from ClubLog.

Dan has two versions available, one showing a fair amount of detail, and a condensed version. Go to <https://wd4dan.net/pota/embed-howto.php> to check them out. These are available at no cost, but there is a "buy me a coffee" button on the page, if you want to thank Dan for his work in making this tool available.

If you want to see how the condensed widget looks on a QRZ page, check out my page at <https://www.qrz.com/db/KJ9B> - IRC KJ9B

Tim Duffy, K3LR, announces: "[Registration](#) is now open for the 2023 Dayton Contest University (CTU) to be held all day on Thursday, May 18, 2023, at the [Hope Hotel in Dayton, Ohio](#). This is the day before [Hamvention](#) opens in Xenia, Ohio. CTU 2022 Dayton was amazing - we expect 2023 CTU to be even better!

2023 will be the 14th year for CTU Dayton. To give you an idea of the quality of the CTU content and activities, you can see [videos and PDF presentations from past CTUs on their website](#).

The 2023 CTU Dayton course outline will be posted once all of the courses have been confirmed. Check the website for updates. Each presentation is carefully prepared with up-to-date information. The CTU professors are experienced contesters and will share their knowledge.

There are scholarships (registration fee paid) available for CTU through a grant from the [Northern California DX Foundation](#) (NCDXF) for students who are up to 25 years old. Please use the "contact us" button on the CTU website to get more information: 2023 student registration information is on the [CTU website](#).

As we did last year, if you want to sign up for the 2023 Dayton CTU and you have given a talk (or will give one by Hamvention 2023) about amateur radio to a ham radio club, Hamfest, or group by May 18, 2023, you qualify for a \$10 discount on your registration fee. Please choose the "Registration with club talk discount" option to get the discount. Spreading the word about amateur radio is lots of fun and can save you money at CTU!

Thanks to all of the CTU sponsors, including [Icom America](#), [DX Engineering](#), the [Northern California DX Foundation](#), [The YASME Foundation](#), the [Radio Club of America](#), and [CQ Magazine](#) for making CTU possible. Thanks to Teri Grizer, K8MNJ; Amy Leggiero, N8AMY, and Jerry Haislip, K1SO, for all of their help with CTU. Special thanks to Scott Neader, KA9FOX, from [qth.com](#) for hosting and constructing the CTU headquarters website. "See you in Dayton at CTU 2023," said Tim Duffy, K3LR.

THANKS FOR READING

THE RCA ARC MONTHLY NEWSLETTER IS COMPILED AND EDITED BY JIM RINEHART, K9RU AND JIM KEETH, AF9A. ALL MATERIAL CONTAINED HEREIN IS OBTAINED FROM THE SOURCES CREDITED AND EDITED FOR THIS NEWSLETTER.
